

*The Emerging Issue of Self-Replicating Technologies and Inadvertent Patent Infringement:  
Bowman v. Monsanto as a Bellwether*

**Christopher Holman**

Professor, University of Missouri-Kansas City School of Law  
Kansas City, MO

In *Bowman v. Monsanto*, decided by the Supreme Court in 2013, the petitioner and a host of supporting *amici* sought a dramatic expansion of the judicially-created doctrine of patent exhaustion, essentially arguing that the authorized sale of a single patented item can exhaust all patent rights with respect to perfect copies of the patented item that have been manufactured and used without the authorization of the patent owner. On its face, this would seem to be an almost frivolous contention, analogous to arguing that the authorized sale of a DVD exhausts all copyright with respect to any copies of the movie reproduced from the DVD. But the patented technology at issue in *Bowman*, a genetically modified (GM) soybean, has a very special attribute that apparently convinced the Court to grant certiorari and seriously consider the petitioner's argument, and that is the ability to self-replicate. Self-replicating patented technologies raise a number of compelling public policy concerns, among them the potential for unintentional, inadvertent, and perhaps even unavoidable patent infringement. In *Bowman*, for example, the petitioner and his supporters pointed to the hypothetical possibility of a farmer being sued for patent infringement resulting from the contamination of his fields with "drifting" patented seeds as justification for an expansion of the doctrine of patent exhaustion to encompass second-generation progeny of patented seeds. Until recently, the courts have had little opportunity to address the issue of self-replication and inadvertent infringement, but the situation is changing rapidly with the increasing prevalence of patented self-replicating technologies in agriculture as well as other promising areas of biotechnology and nanotechnology. This paper describes the emerging issue of self-replicating technologies and inadvertent infringement, discusses potential responses by the courts and Congress, and proposes law and policy designed to address legitimate concerns while maintaining effective incentives for innovation.

**Email:** holmancm@umkc.edu

Holman